

CLAIMS

The invention claimed is:

- 5 1. A method of rendering a halftone cell comprising a plurality of pixels, said method comprising the steps of:
- (a) rendering a first pixel at a first intensity; and
- (b) rendering a second pixel at a second intensity, said second intensity being greater than a minimum intensity, less than a maximum intensity, and
- 10 substantially different from said first intensity.
2. The method of claim 1 wherein said second pixel is displaced vertically and horizontally relative to said first pixel.
- 15 3. The method of claim 1 wherein said second intensity differs from said first intensity by approximately one half the difference between said maximum and said minimum intensities.
4. A method of rendering a halftone cell comprising an array of dots, a dot
- 20 comprising at least one pixel, said method comprising the steps of:
- (a) rendering a first dot at a first intensity;
- (b) rendering a dot pixel at substantially said first intensity, said second dot being displaced vertically and horizontally in said array from said
- 25 first dot;
- (c) rendering a dot pixel at a second intensity, said second intensity being greater than a minimum intensity, less than a maximum intensity, and substantially different from said first intensity; and
- 30 (d) rendering a fourth dot at substantially said second

intensity, said fourth dot being displaced vertically and horizontally relative to said third dot.

5. The method of claim 4 wherein said second intensity differs from said first intensity by approximately one half the difference between said maximum and said minimum intensities.

6. A method of rendering a halftone image comprising a plurality of halftone cells, said method comprising the steps of:

- (a) sampling an intensity of an original image at a plurality of locations;
- (b) rendering a first pixel of a halftone cell at a first intensity in response to a first sample, said first intensity relating a location and an intensity of said first sample;
- (c) rendering a second pixel of said halftone cell at a second intensity in response to a second sample, said second intensity relating a location and an intensity of said second sample and being greater than a minimum intensity, less than a maximum intensity, and substantially different from said first intensity.

7. The method of claim 6 wherein said second pixel is displaced vertically and horizontally relative to said first pixel in an array of pixels comprising of said halftone cell.

8. The method of claim 6 wherein said difference between said first and said second intensities is approximately one half of a difference between said minimum and said maximum intensities.

5 9. The method of claim 6 wherein the step of rendering a first pixel of a halftone cell at a first intensity in response to a first sample, said first intensity relating a location and an intensity of said first sample comprises the step of selecting a table according to said location of said sample, said table comprising an intensity of said sample and a corresponding intensity of said pixel.

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10. The method of claim 6 wherein the step of rendering a first pixel of a halftone cell at a first intensity in response to a first sample, said first intensity relating a location and an intensity of said first sample comprises the steps of:

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(a) selecting a transfer function according to said location, said transfer function relating an intensity of said sample and a corresponding intensity of said pixel; and

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(b) calculating said intensity of said pixel from said intensity of sample in accordance with said transfer function.